5 As of Healthy Pregnancy Weight Gain™

Canadian Obesity Network
Discussion About Gestational Weight Gain Should Occur With Every Woman Who is Pregnant or Planning a Pregnancy

A woman planning or experiencing a pregnancy is usually very motivated to be as healthy as possible. Discussion of gestational weight gain from a patient-centered perspective allows providers to have sensitive conversations that are meaningful to the individual woman, regardless of her prepregnancy body mass index (BMI – underweight, normal weight, overweight, or obese). Supporting all women to keep gestational weight gain within recommended parameters is important because unhealthy weight gain (excessively lower or higher than recommended) is linked to a range of negative health outcomes for mothers, babies, and children.

Achieving Healthy Gestational Weight Gain is About Improving Health and Well-Being of Both Mothers and Babies

Success should be measured by the degree to which a woman adopts behaviours that improve or maintain health, in addition to the amount of weight she gains. Even modest approximations to the recommended gestational weight gain can improve personal health and reduce post-partum weight retention.
Early Action Means Addressing Root Causes and Removing Roadblocks

Successful weight management of gestational weight gain begins with identifying how much weight a woman should gain based on her prepregnancy BMI category and having early and repeated discussions to identify and address the myths, barriers, and facilitators of managing gestational weight gain. Refer to Health Canada guidelines.

Pregnancy-Related Health Beliefs Can Be Powerful Influences on Weight Gain in Pregnancy

Understanding a woman’s cultural context is critical. Making assumptions about health behaviours can lead to ineffective interventions.

Achieving Goals is Different for Every Woman

Women vary considerably in their readiness and capacity for managing gestational weight gain. “Achieving Goals” can be defined as better quality of life, greater self-esteem, higher energy levels, improved overall health and/or achieving weight gain within the recommended range. Guideline-concordant weight gain in pregnancy is not a realistic goal for some women, and setting unachievable targets might simply set women up for failure. Instead, help women set weight targets that they can achieve to try to improve health for themselves and their babies.
Body weight may be a sensitive issue. Even though weight gain in pregnancy is expected, ‘asking’ is an important first step.

- Do acknowledge that weight gain is healthy and to be expected during pregnancy.
- Do provide education about the recommended amount of weight gain to optimize health.
- Do not make assumptions about a woman’s life, lifestyle or motivation. She may be living as healthy a lifestyle as she can, or she may be ready to take action, or in the action stage of making changes.

- Be non-judgmentally curious. Ask questions, listen to the woman’s answers and respond in a manner that validates her experience, acknowledges her autonomy to make her own choices and invites her to consider the benefits of your recommendations.
- If she is not ready to follow through on your recommendations be prepared to address her concerns and barriers and explore her reasons not to change. Ask for permission to keep the conversation about healthy weight gain going at future visits.
Explore Readiness for Change

• Determining a woman’s readiness to change behaviour in accordance with your recommendations is essential for success. Recognize that different women will be at different stages of readiness.

• Supporting behaviour change and increasing readiness if it is lacking requires a genuine collaboration that acknowledges that the woman is central.

• Initiating change when a woman is not ready can result in frustration and elicit resistance and learned helplessness. This can interfere with future attempts to support healthy change.

Sample Questions on How to Begin a Conversation about Weight:

• Could we discuss your thoughts and feelings regarding weight gain during your pregnancy?
• Are you concerned about weight gain during pregnancy?
• Would you be interested in information about weight gain during pregnancy?
ASSESS Potential “Root Causes” of Guideline-Discordant Weight Gain

• Assess prepregnancy BMI.
• Weigh at every prenatal visit.
• Use the 4Ms framework (mental, mechanical, metabolic and milieu) to assess drivers and complications of guideline-discordant pregnancy weight gain as well as barriers to guideline-concordant pregnancy weight gain at every prenatal visit.
• Consider pregnancy-related health beliefs – these can be powerful influences on gestational weight gain.

Obesity Class

<table>
<thead>
<tr>
<th>Prepregnancy BMI</th>
<th>Mean^ rate of weight gain in the 2nd and 3rd trimester</th>
<th>Recommended total weight gain(^b) (for singleton pregnancies)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kg/week</td>
<td>lb/week</td>
</tr>
<tr>
<td>Underweight (&lt;18.5 kg/m(^2))</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Normal weight (18.5-24.9 kg/m(^2))</td>
<td>0.4</td>
<td>1.0</td>
</tr>
<tr>
<td>Overweight (25.0-29.9 kg/m(^2))</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Obese (≥30.0 kg/m(^2))</td>
<td>0.2</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Taken from Health Canada website: www.hc-sc.gc.ca/fn-an/nutrition/prenatal/ewba-mbsa-eng.php

a. Rounded values.

b. Calculations for the recommended weight gain range assume a gain of 0.5 to 2 kg (1.1 to 4.4 lbs) in the first trimester (Siega-Riz et al., 1994; Abrams et al., 1995; Carmichael et al., 1997).

c. A lower weight gain may be advised for women with a BMI of 35 or greater, based on clinical judgement and a thorough assessment of the risks and benefits to mother and child (Crane et al., 2009; Oken et al., 2009; Hinkle et al., 2010).
The 4Ms of Gestational Weight Gain:

**Mental**
- Addiction
- Anxiety
- Body image
- Depression
- Emotional eating and eating disorders
- Cravings and aversions
- Insomnia

**Mechanical**
- Incontinence
- Pain
- Sleep disturbance
- Disability and reduced mobility

**Metabolic**
- Diabetes mellitus
- Hyperemesis gravidarum and nausea
- Medications
- Multiple gestation
- Preeclampsia

**Milieu**
- Family structure including relationships and children
- Employment
- Ethnicity and culture
- Accessibility to healthy food
- Income
- Support at home and at work
Gestational weight gain (lower or higher than recommended) is linked to negative health outcomes for mothers and their babies.

Gestational weight management should be improving health and well-being for both the woman and her baby rather than only measuring weight.

Discuss the need for a strategy throughout pregnancy and the postpartum period

- All management strategies must be feasible and sustainable.
- Different strategies may be needed at different stages.

Explain Benefits of Gaining Within the Guidelines

Healthy weight gain within the guidelines can result in substantial health improvements for:

**Women:**
- Fewer complications before, during, and after birth.
- Blood glucose control.
- Blood pressure control.
- Less weight to lose after birth.

**Babies:**
- Healthy birth weight.
- Less birth trauma.
- Less chance of needing to be admitted to a special care nursery/intensive care nursery (e.g. blood glucose control, temperature control).
- Less chance of overweight and obesity during childhood and as an adult.
Advise on Management Options

**WEIGHT GAIN**
should be based on prepregnancy BMI. Women with higher prepregnancy BMI require less weight gain. Please refer to the guidelines.

**SLEEP, TIME, and STRESS**
management interventions may improve eating and activity behaviours as well as mood.

**EATING BEHAVIOURS**
should focus on healthy nutrition. An extra 2 - 3 Food Guide servings totaling ~250 - 500 kcal/day
- Trimesters 2 and 3 only.
- Fruit and vegetables, grains, milk and alternatives, meat and alternatives.
- E.g. 1 piece of fruit + ¾ c of yogurt; 1 piece of toast + 1 cup of milk.
- Exercise caution with cravings

**PHYSICAL ACTIVITY**
interventions should promote physical activity (if there are no contraindications) throughout pregnancy.

**SEDENTARY BEHAVIOUR**
women should be encouraged to reduce sedentary time (e.g. television, computer, social media, video games).

**MENTAL HEALTH**
is an important aspect of health. Women should be encouraged to focus on experiences (activities or relationships) that enhance positive self-esteem, well-being and quality of life throughout their pregnancy. Referral for mental health treatment in situations where there are underlying/co-morbid psychological issues or problems is recommended.
Agree on Sustainable Behavioural Goals

• Focus on sustainable behavioural changes rather than on specific weight targets.
• Unrealistic goals can lead to disappointment and may encourage unhealthy habits and non-adherence.
• Even for a woman who has exceeded weight gain recommendations, meeting the recommended rates of weekly weight gain may be the best goal.
• Behavioural goals may be different for each woman.
Behavioural goals should be SMART:

- **Specific**
- **Measurable**
- **Achievable**
- **Rewarding**
- **Time-bound**

- Flexible self-monitoring with a lifestyle journal can help initiate and sustain behavioural change.

Agree on the Plan

- Management plans should be realistic and sustainable.
- Management plans should consider addressing environmental, socio-economical, familial, or cultural drivers of excessive weight gain (e.g. anxiety, family stressors, etc.).
- The **success** of the plan should be measured as sustained **healthy behaviours** and mother’s **well-being** (e.g. physical and mental health).
ASSIST Women in Identifying Barriers and Facilitators, Educate, Refer and Arrange Follow-Up

Assist Women in Identifying and Addressing Drivers and Barriers
- Drivers and barriers may include environmental, socioeconomical, emotional, medical or cultural factors.
- Physical barriers or physical discomfort (e.g. lack of sleep, mobility) may hinder participation in routine daily activities.

Assist Women in Identifying Facilitators and in Maintaining Healthy Behaviours
- Supporting women to maintain/regain healthy behaviours may increase their personal commitment to health in the face of barriers.
- Identifying facilitators to guideline-concordant gestational weight gain may help tip the balance toward motivation for healthy behaviour as well as support self-efficacy.
Offer Education and Resources

- Education to improve understanding is central to self-management.
- Help women identify and seek out CREDIBLE pregnancy specific health behaviour and weight-management information and resources.

Refer to Appropriate Providers

- Evidence supports that weight management throughout pregnancy is more successful using an interdisciplinary team approach.
- Choice of appropriate provider (e.g. GP, OB, MFM, midwife, nurse, dietitian, exercise physiologist, psychologist, etc.) should reflect identified DRIVERS and complications of excessive weight gain as well as BARRIERS to weight management during this critical period.

Arrange Follow-Up

- Follow-up is essential, given the prevalence of excessive weight gain in pregnancy and the subsequent high probability of post-partum weight retention, which can lead to immediate and downstream complications.
- The child-bearing years are a natural period of weight cycling (for those who have experienced more than one pregnancy), and returning to a healthy weight should be encouraged.
Professional Resources
Sign up at www.obesitynetwork.ca to become a member of the Canadian Obesity Network, Canada’s national obesity NGO with access to additional obesity education, resources, and networking opportunities with national obesity experts.

Abdominal Adiposity
A site on the relationships between abdominal obesity, type 2 diabetes and cardiovascular disease, with specific information about the relationship between waist measurement and glucose intolerance in pregnancy. www.myhealthywaist.org

Alberta Health Services
Healthy Pregnancy Weight Gain.

Key Actions for Healthy Pregnancy Weight Gain.
Actions and messaging to support women with healthy weight gains during pregnancy. www.albertahealthservices.ca/ps-1029951-key-actions-hpwg.pdf

Nutrition Guideline – Pregnancy.

Best Start Resource Centre
Obesity in Preconception and Pregnancy.
A resource and program guide focused on obesity in preconception and pregnancy. www.beststart.org/resources/preconception

Canadian Women’s Health Network
A national organization dedicated to improving the health and lives of women in Canada and the world by collecting, producing, distributing and sharing knowledge, education, and resources, including information on weight expectations in pregnancy. www.cwhn.ca

College of Family Physicians of Canada (CFPC)
Dedicated organization responsible for establishing standards for the training, certification and lifelong education of family physicians. The site gives family physicians the opportunity to ask questions and discuss pregnancy-related health issues. www.cfpc.ca

Motherisk – The Hospital for Sick Children
Provides information and research for health professionals on various health topics pertaining to pregnancy, breastfeeding, safety and medications. www.motherisk.org

PARMed-X for PREGNANCY
A guideline for health screening prior to participation in a prenatal fitness class or other exercise. www.csep.ca/cmfiles/publications/parq/parmed-xpreg.pdf
Joint SOGC/CSEP Clinical Practice Guideline

Exercise in Pregnancy and the Postpartum Period.
Advising obstetric care providers on the maternal, fetal, and neonatal implications of aerobic and strength-conditioning exercises in pregnancy.

Society of Obstetricians and Gynecologists of Canada (SOGC)
The SOGC is a leading authority on reproductive health care, producing national clinical guidelines for public and medical education on important women's health issues. www.sogc.org

Sport Information Resource Centre (SIRC)
Exercise and Pregnancy: Canadian Guidelines for Health Care Professionals.
The benefits of activity in pregnancy and specific details on which exercises are safe and which should be avoided. www.sirc.ca/newsletters/may12/documents/Free/guidelines.pdf

Postpartum Support International
Provides general information regarding postpartum depression. www.postpartum.net

perinatal.anxietybc.com
Self help treatment of prenatal and postnatal anxiety with focused examples on what causes anxiety to new mom's, but also links to the general anxietybc website for management of specific disorders, e.g., social anxiety, OCD, PTSD, generalized anxiety

womensmentalhealth.org
Research from Harvard

For additional information including KEY REFERENCES and PATIENT RESOURCES on obesity prevention and management, please refer to our website at www.obesitynetwork.ca

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ASK for Permission to Discuss Weight

ASSESS Potential “Root Causes” of Guideline-Discordant Weight Gain

AGREE on a Realistic SMART Plan to Achieve Health Behaviour Outcomes

ASSIST Women in Identifying Barriers and Facilitators, Educate, Refer and Arrange Follow-Up

ADVISE on Pregnancy Weight Gain Risk and Management Options